

ABSTRACT OF THE DISCLOSURE

A transmit and receiving system including a first array including at least one antenna element disposed to provide a transmit antenna. The system further includes a second array having a second different plurality of antenna elements disposed to provide a receive antenna. The first array is coupled to a switching system, which is operative to selectively form at least one transmit beam. The second array is coupled to a beam combining system, which is operative to selectively form a plurality of receive beams.